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1 25  
MDINASRALANVYDLPDFFPKIDDLVRDAKDALEPYWR

50 75  
SDSIKKHVLIATHFVDLIEDFWQTTQGMHEIAEALRAVI

100  
PPTTTPVPAGYLIQHEEAEEIPLGDLFKHQEERIVSFQP

125 150  
DYPITARIHAHLKAYAKINEESLDRARRLLWWHYNCLLW

175  
GEANVTNYISRLRTWLSTPERYRGRDAPTIEAITRPIQV

200 225  
AQGGRKTSSGTRKPRGLEPRRRKVKTTVVYGRRRSKSRD

250 262  
RRAPSPQRAGSPLPRSSSSHRRSPSPRK

FIG. 1



NUCLEIC ACID SEQUENCE OF DUCK HEPATITIS B CORE PROTEIN

1 50  
ATGGATATCAATGCTTCTAGAGCCTTAGCCAATGTTTATGATTGCCAGATGATTTCTTCCC

100  
AAAAATTGATGATCTTGTAAGGGATGCGAAGGATGCTTTAGAACCTTATTGGAGATCAGATT

150  
CAATAAAGAAACATGTTTTAATTGCAACTCACTTTGTGGATCTTATTGAAGACTTCTGGCAA

200  
ACTACTCAGGGTATGCATGAAATAGCTGAAGCCTTAAGAGCAGTTATACCACCTACTACAAC

250 300  
ACCAGTTCCCGCAGGATATCTGATTGAGCAGCAAGAGGCTGAGGAGATTCTCTGGGAGATT

350  
TATTTAAACATCAGGAAGAAAGGATAGTTAGTTTCCAACCGGATTATCCTATTACTGCACGA

400  
ATTCATGCACACCTGAAAGCTTATGCAAAGATTAACGAGGAATCACTGGATAGGGCTAGGAG

450  
ATTGCTTTGGTGGCATTACAATTGTTTACTGTGGGGAGAAGCTAACGTTACTAATTATATTT

500 550  
CTCGGCTTCGCACTTGGCTATCAACACCTGAGAGATACAGAGGCCGAGATGCCCCAACCAT

600  
GAAGCAATCACTAGACCAATCCAAGTGGCTCAGGGAGGCAGAAAAACATCTTCGGGTACTAG

650  
AAAACCTCGTGGACTCGAACCTAGAAGAAGAAAGTTAAAACCACAGTTGTCTATGGGAGAA

700  
GACGTTCAAAGTCCAGGGATAGGAGAGCCCCTTACCCCCAACGTGCGGGCTCCCCTCTCCCG

750 786  
CGTAGTTGAGCAGCCACAGAAGATCTCCCTCGCCTAGGAAA

FIG. 2

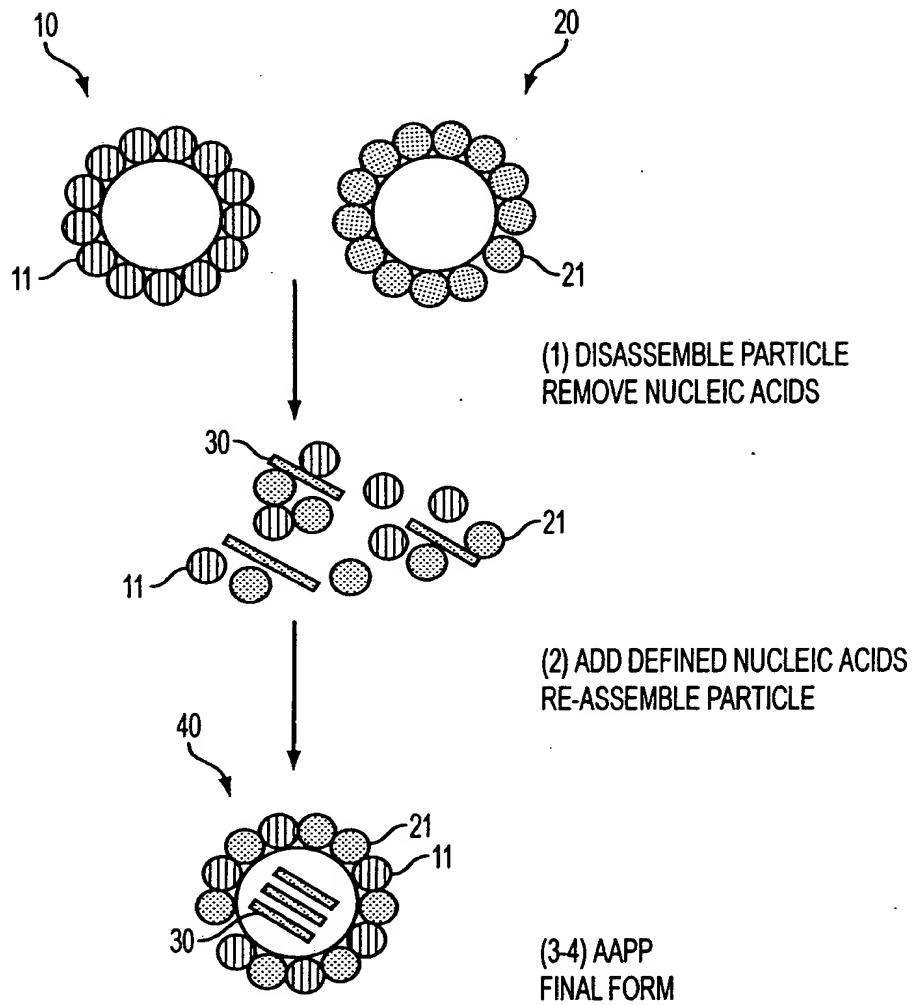


FIG. 3

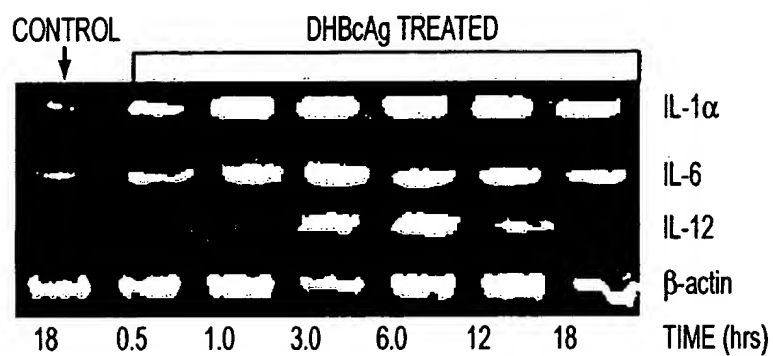


FIG. 4A

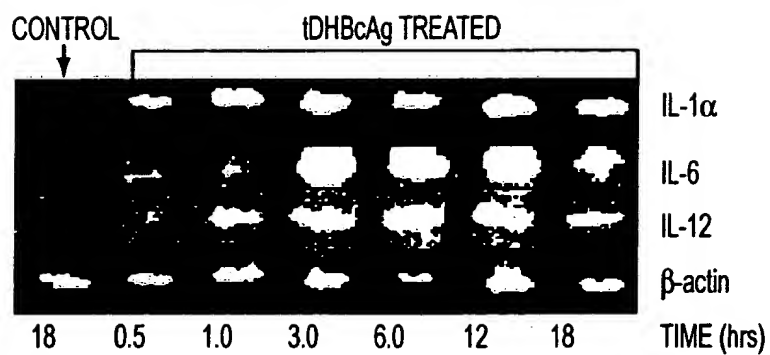


FIG. 4B

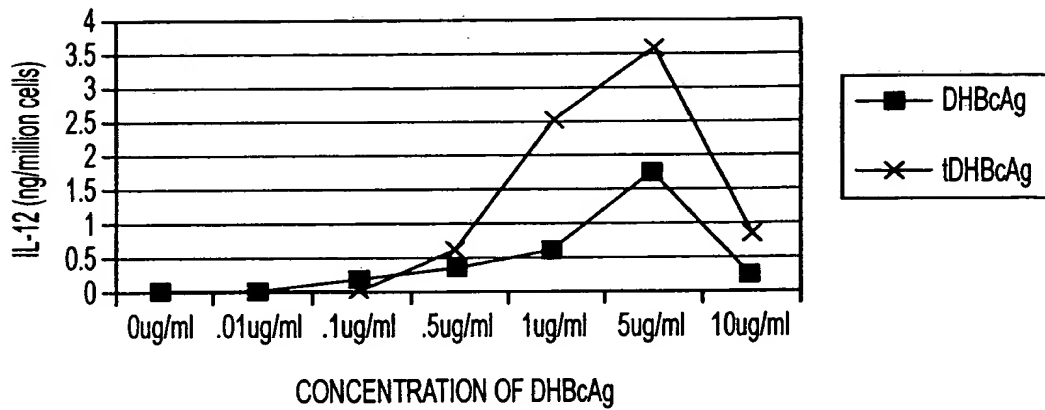


FIG. 5A

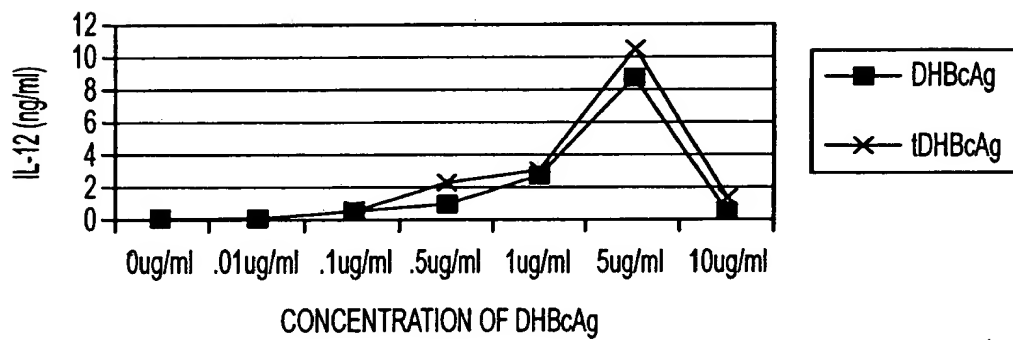


FIG. 5B

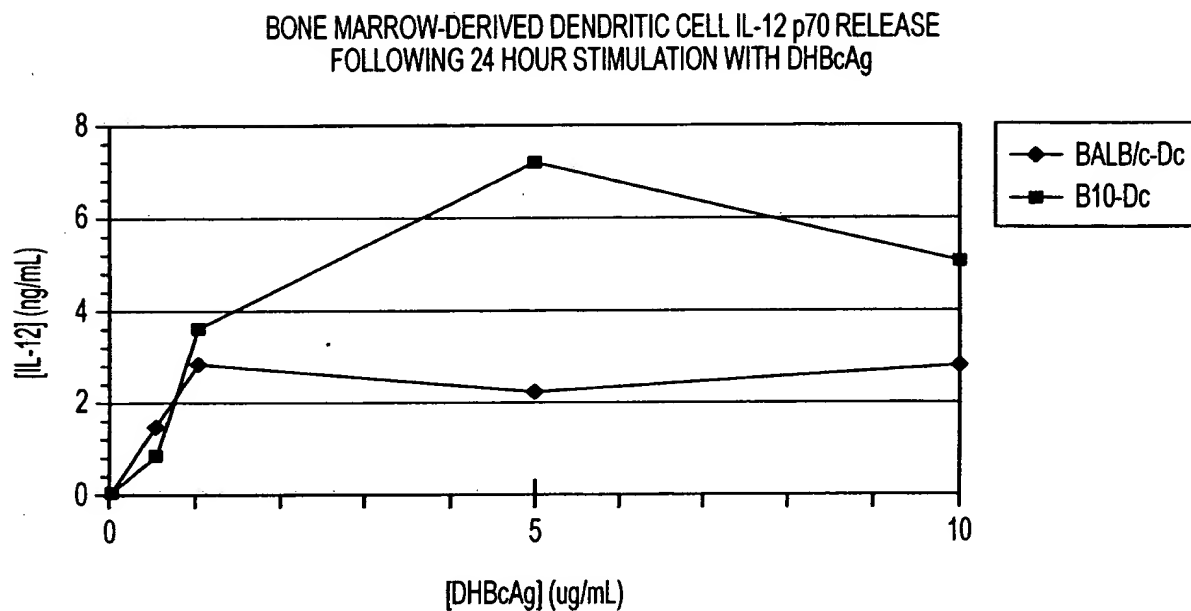


FIG. 6

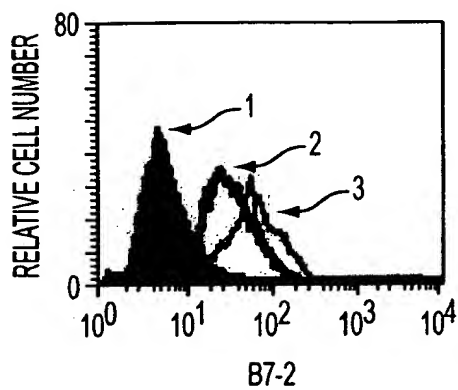


FIG. 7A

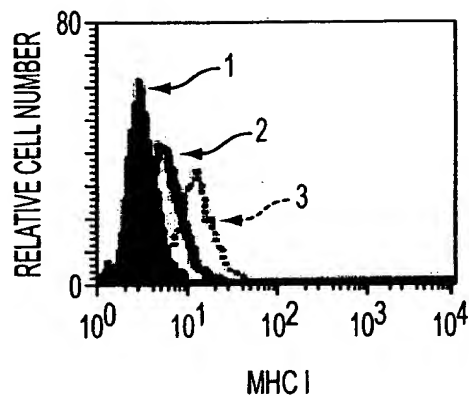


FIG. 7B

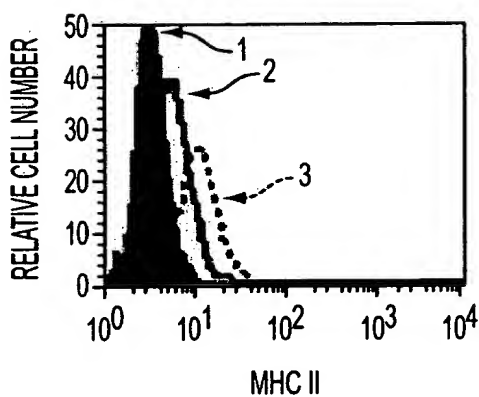


FIG. 7C

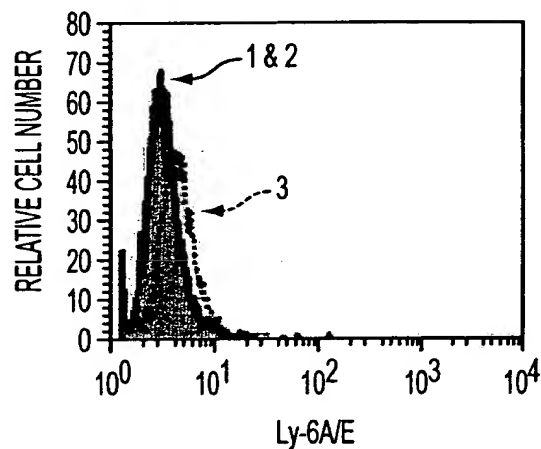


FIG. 7D

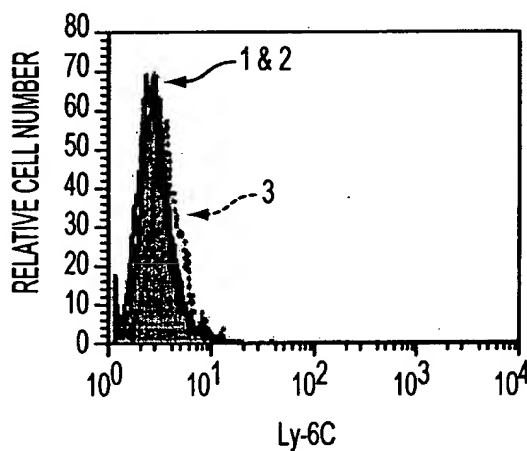


FIG. 7E



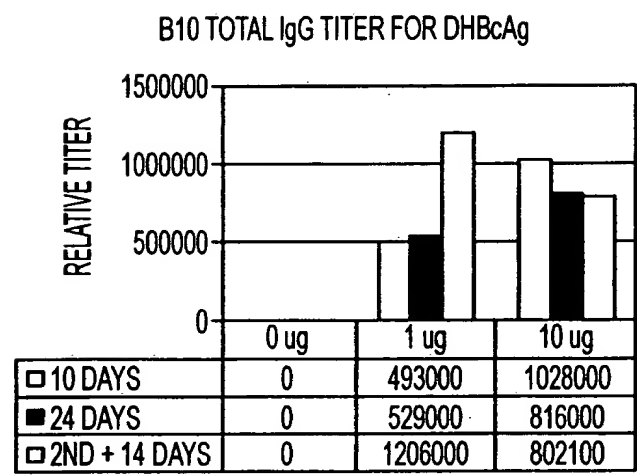


FIG. 8A

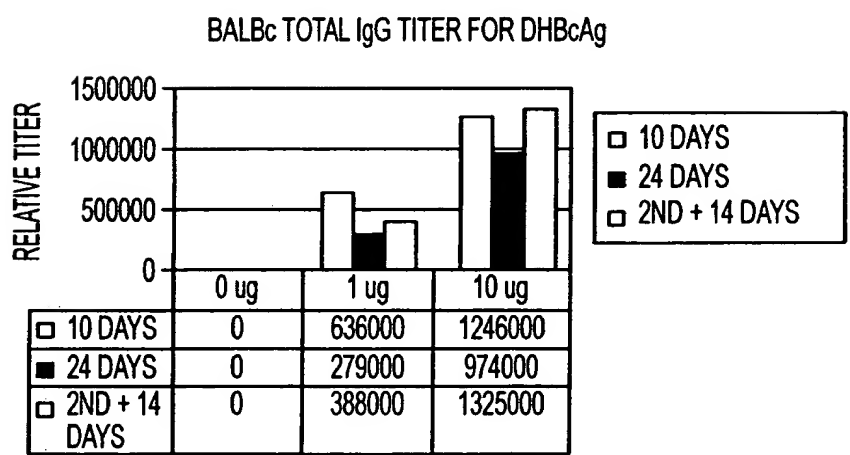


FIG. 8B

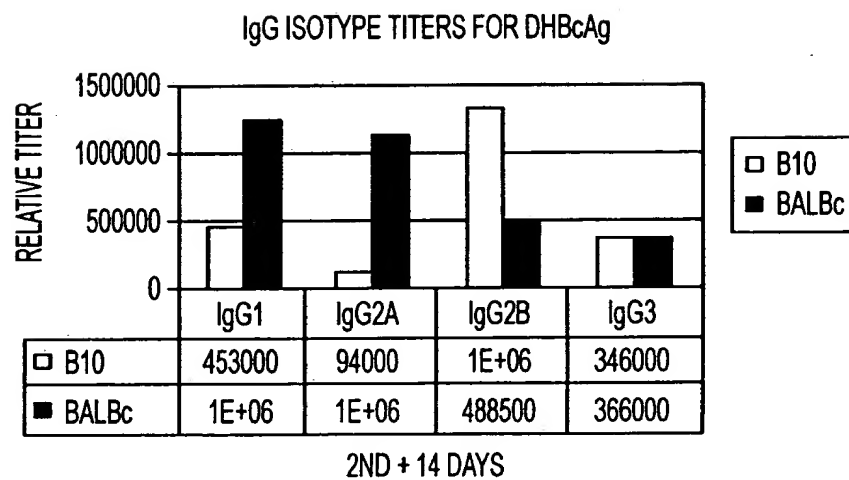


FIG. 9

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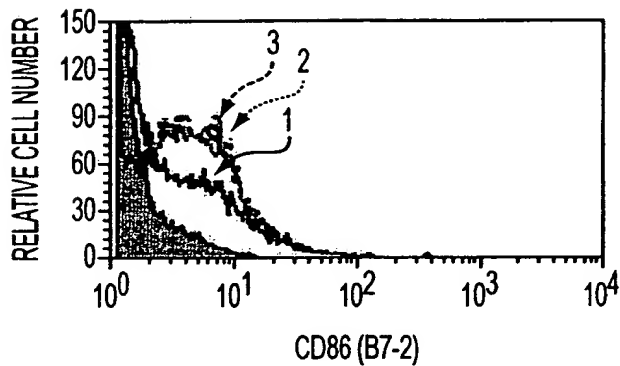


FIG. 10A

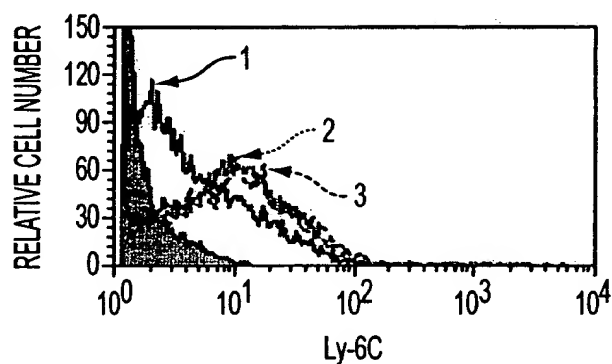


FIG. 10B

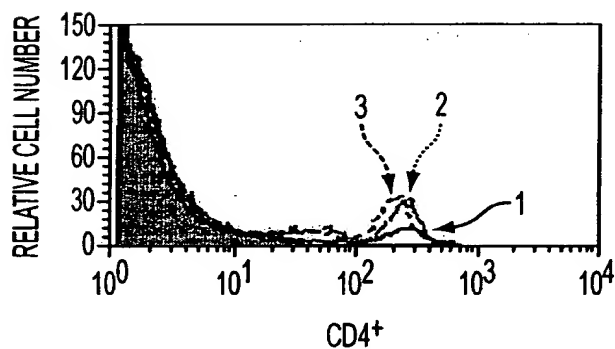


FIG. 10C

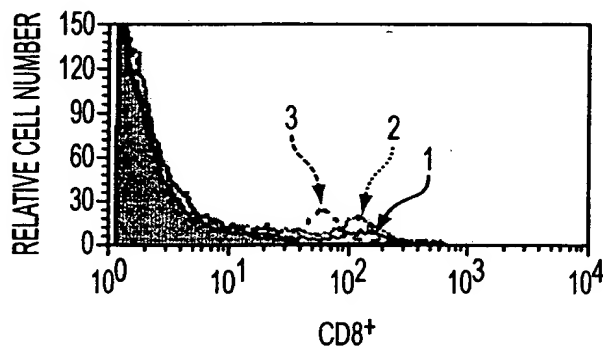


FIG. 10D

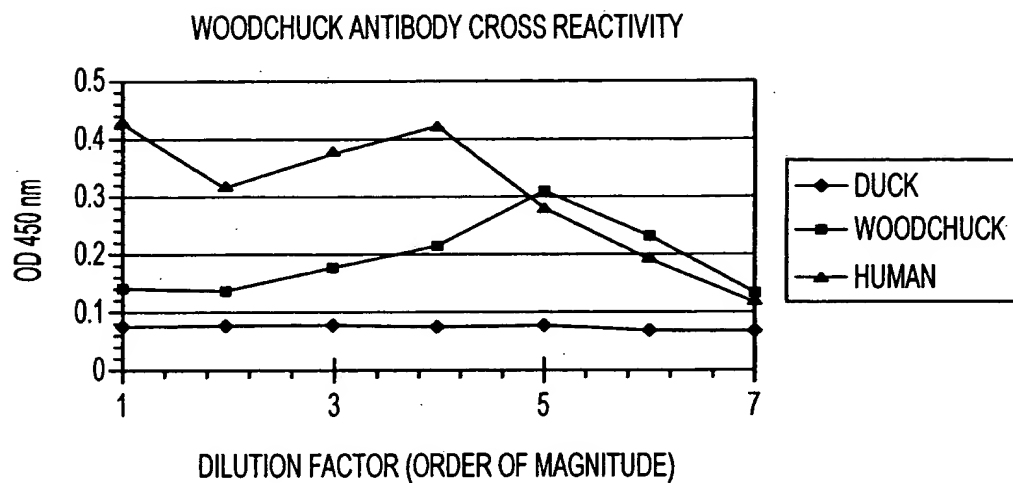


FIG. 11A

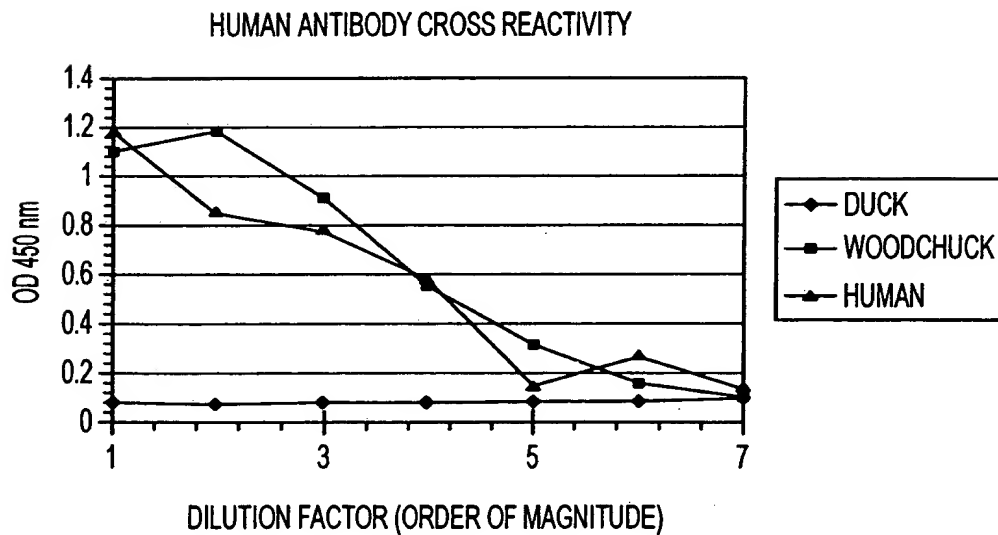
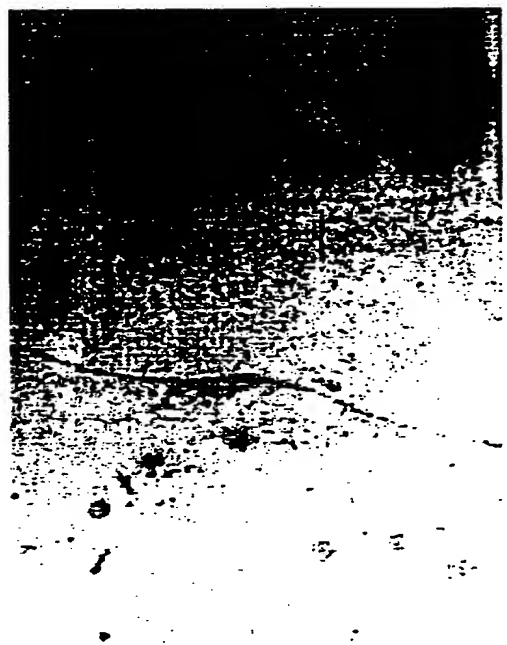


FIG. 11B



1 2 3 4

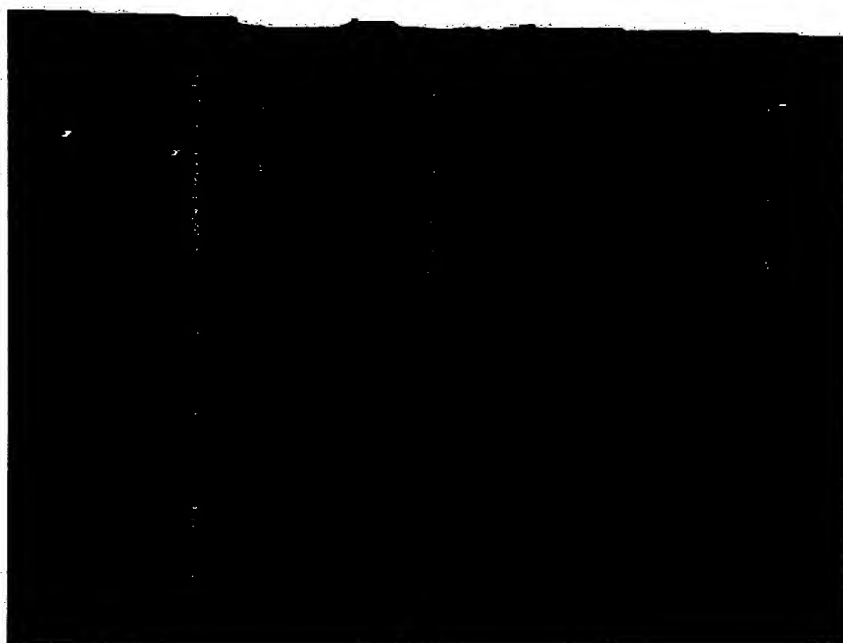


← DUCK HBcAg

FIG. 12



1 2 3 4 5



← DUCK HBcAg

FIG. 13

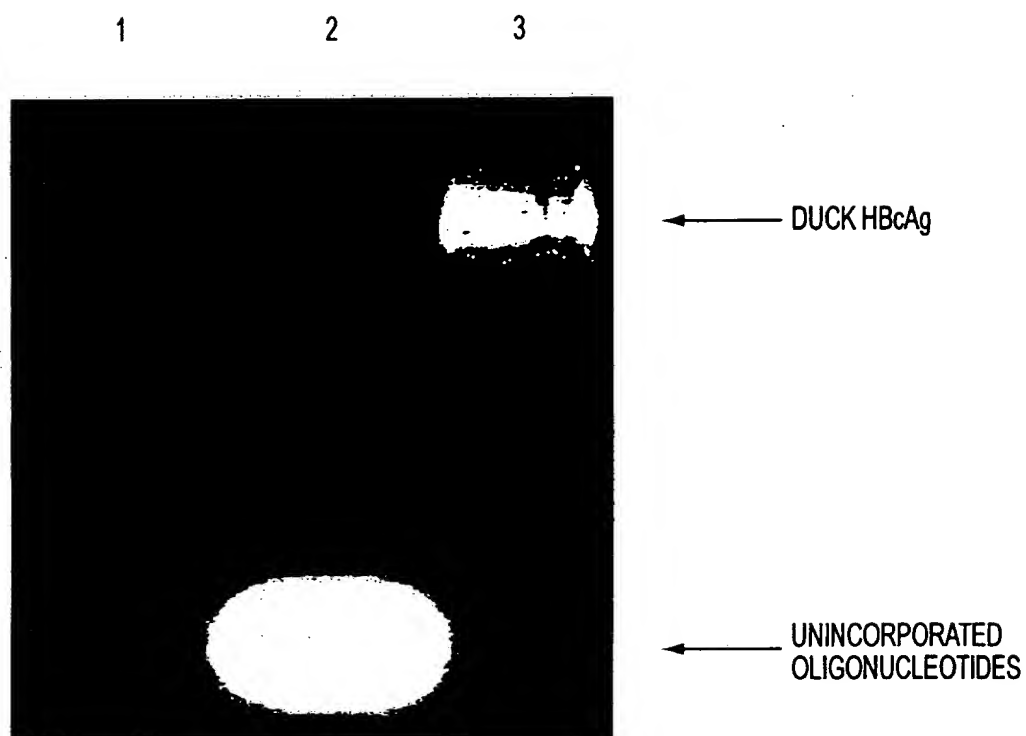


FIG. 14

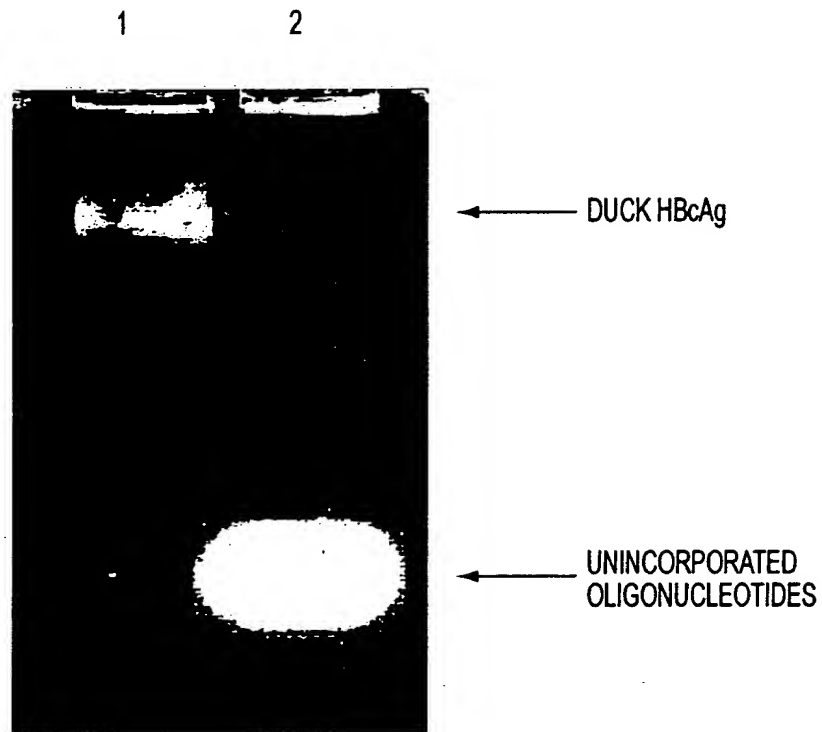


FIG. 15



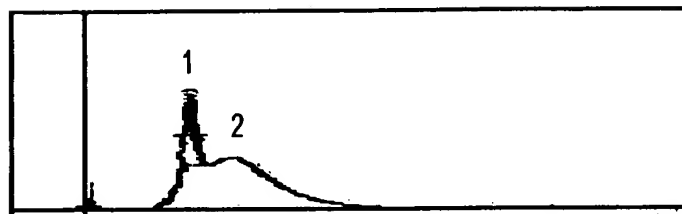


FIG. 16A

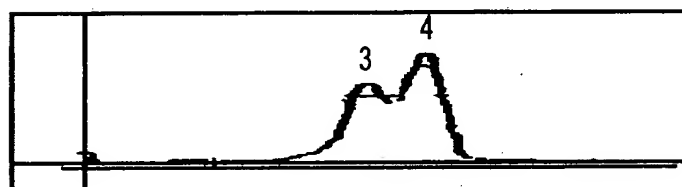


FIG. 16B

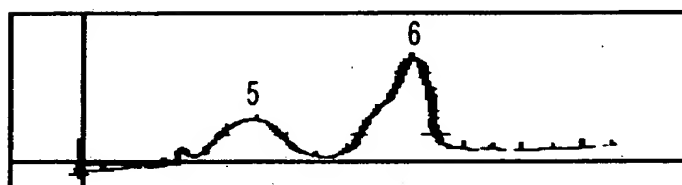


FIG. 16C



AMINO ACID SEQUENCE OF DUCK HEPATITIS B CORE PROTEIN MUTANT 1-239

1 25  
MDINASRALANVYDLPDDEFKIDDLVRDAKDALEPYWR  
50 75  
SDSIKKHVLIATHFVDLIEDFWQTTQGMHEIAEALRAVI  
100  
PPTTTPVPAGYLIQHEEAEIPLGDLFKHQEERIVSFQP  
125 150  
DYPITARIHAHLKAYAKINEESLDRARRLLWWHYNCLLW  
175  
GEANVTNYISRLRTLWLSTPERYRGRDAPTIEAITRPIQV  
200 225  
AQGGRKTSSGTRKPRGLEPRRRKVKT TVVYGRRRSKSRD  
239  
RRAPS

FIG.17



NUCLEIC ACID SEQUENCE OF DUCK HEPATITIS B CORE PROTEIN MUTANT 1-239

1 50  
ATGGATATCAATGCTTCTAGAGCCTTAGCCAATGTTTATGATTGCCAGATGATTTCTTCCC

100  
AAAAATTGATGATCTTGTAAGGGATGCGAAGGATGCTTTAGAACCTTATTGGAGATCAGATT

150  
CAATAAAGAAACATGTTTTAATTGCAACTCACTTTGTGGATCTTATTGAAGACTTCTGGCAA

200  
ACTACTCAGGGTATGCATGAAATAGCTGAAGCCTTAAGAGCAGTTATACCACCTACTACAAC

250 300  
ACCAGTTCCCGCAGGATATCTGATTCAACGAGAGGCTGAGGAGATTCTCTGGGAGATT

350  
TATTTAAACATCAGGAAGAAAGGATAGTTAGTTTCCAACCGGATTATCCTATTACTGCACGA

400  
ATTCATGCACACCTGAAAGCTTATGCAAAGATTAACGAGGAATCACTGGATAGGGCTAGGAG

450  
ATTGCTTTGGTGGCATTACAATTGTTTACTGTGGGGAGAAGCTAACGTTACTAATTATATTT

500 550  
CTCGGCTTCGCACTTGGCTATCAACACCTGAGAGATACAGAGGCCGAGATGCCCCAACCATT

600  
GAAGCAATCACTAGACCAATCCAAGTGGCTCAGGGAGGCAGAAAAACATCTTCGGGTACTAG

650  
AAAACCTCGTGGACTCGAACCTAGAAGAAGAAAAGTTAAAACCACAGTTGTCTATGGGAGAA

700 718  
GACGTTCAAAGTCCAGGGATAGGAGAGCCCCTTCA

FIG. 18



AMINO ACID SEQUENCE OF TRUNCATED DUCK HEPATITIS B CORE PROTEIN

1 25  
MDINASRALANVYDLPDDFFPKIDDLVRDAKDALEPYWR

50 75  
SDSIKKHVLIATHFVDLIEDFWQTTQGMHEIAEALRAVI

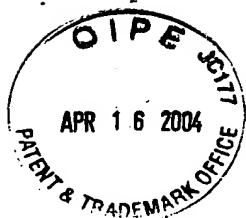
100  
PPTTTPVPAGYLIQHEEAEEIPLGDLFKHQEERIVSFQP

125 150  
DYPITARIHAHLKAYAKINEESLDRARRLLWWHYNCLLW

175  
GEANVTNYISRLRTWLSTPERYRGRDAPTIEAITRPIQV

200 214  
AQGGRKTSSGTRKPRGLEP

FIG. 19



NUCLEIC ACID SEQUENCE OF TRUNCATED DUCK HEPATITIS B CORE PROTEIN

1 50  
ATGGATATCAATGCTTCTAGAGCCTTAGCCAATGTTTATGATTTGCCAGATGATTTCTTCCC  
100  
AAAAATTGATGATCTTGTAAGGGATGCGAAGGATGCTTTAGAACCTTATTGGAGATCAGATT  
150  
CAATAAAGAAACATGTTTTAATTGCAACTCACTTTGTGGATCTTATTGAAGACTTCTGGCAA  
200  
ACTACTCAGGGTATGCATGAAATAGCTGAAGCCTTAAGAGCAGTTATACCACCTACTACAAC  
250 300  
ACCAGTTCCCGCAGGATATCTGATTCAGCACGAAGAGGCTGAGGAGATTCCCTCTGGGAGATT  
350  
TATTTAAACATCAGGAAGAAAGGATAGTTAGTTTCCAACCGGATTATCCTATTACTGCACGA  
400  
ATTCATGCACACCTGAAAGCTTATGCAAAGATTAACGAGGAATCACTGGATAGGGCTAGGAG  
450  
ATTGCTTTGGTGGCATTACAATTGTTTACTGTGGGGAGAAGCTAACGTTACTAATTATATTT  
500 550  
CTCGGCTTCGCACTTGGCTATCAACACCTGAGAGATACAGAGGCCGAGATGCCCCAACCATT  
600  
GAAGCAATCACTAGACCAATCCAAGTGGCTCAGGGAGGCAGAAAAACATCTTCGGGTACTAG  
642  
AAAACCTCGTGGACTCGAACCT

FIG. 20